CLAIMS

What is claimed is:

1.   A method of providing access control for an emergent model on a computer

network, comprising the steps of:

5   generating data objects and/or function objects;

publishing references to the data objects and/or the function objects;

subscribing to the data objects and/or the functions by creating

relationships between the data objects and/or the function objects through

referencing the data objects and/or the function objects within the function

10   objects, thereby linking the data objects and/or the function objects, wherein

networks of linked data objects and/or function objects emerge;

sending messages to referencing data objects and/or function objects

when referenced data objects and/or referenced function objects change;

solving the functions when the messages are received;

15   storing the data objects and/or the function objects in a distributed

manner across multiple computing devices on a computer network;

identifying a user of the emergent model and assigning appropriate read,

write, execute and administrative permissions to the user on a per data objects

and/or function objects basis, the permissions being used to limit access to a

20   specific subset of the data objects and/or function objects; and

wherein the emergent networks of linked data objects and/or function

objects are independently published to, and subscribed to, in a manner free of a

globally predefined network of data objects and/or function objects, thereby

generating the emergent model.

25   2.   The method of Claim 1 wherein at least a part of the configuration of the

networks of linked data objects and/or function objects is predefined and used to determine which data objects and/or function objects are generated on which of the computing devices in the computer network.

3. The method of Claim 1 wherein a user interface is defined that displays the data objects and/or function objects on a computing device on the computer network using a client process that communicates with a server process wherein the data objects and/or function objects can be viewed on any computing device connected to the computer network.

4. The method of Claim 1 wherein the data objects and/or function objects are stored in logical groups.

5. The method of Claim 1 wherein the references to the data objects and/or function objects are published using electronic media, print media or human conversation.

6. The method of Claim 1 wherein the step of generating the data objects and/or function objects provides an interface mapping for data objects and/or function objects stored in application programs, databases or computer code libraries.

7. The method of Claim 1 wherein the function objects are implemented by computer code that is complied, dynamically linked and evaluated at runtime.

8. The method of Claim 1 wherein the function objects are implemented by computer code that is interpreted and evaluated at runtime.

9. The method of Claim 1 wherein the sending or receiving of messages can be enabled or disabled based on predefined criteria.

10.   The method of Claim 9 wherein the criteria is based upon message source, message destination or message contents.

11.   A method of generating a decentralized model on a computer network, comprising the steps of:

5   generating data objects and/or function objects;

publishing references to the data objects and/or the function objects;

subscribing to the data objects and/or the functions by creating relationships between the data objects and/or the function objects through referencing the data objects and/or the function objects within the function

10   objects, thereby linking the data objects and/or the function objects, wherein networks of linked data objects and/or function objects emerge;

sending messages to referencing data objects and/or function objects when referenced data objects and/or referenced function objects change;

solving the functions when the messages are received;

15   storing the data objects and/or the function objects in a distributed manner across multiple computing devices on a computer network;

identifying a user of the decentralized model and assigning appropriate read, write, execute and administrative permissions to the user on a per data objects and/or function objects basis, the permissions being used to limit access

20   to a specific subset of the data objects and/or function objects; and

wherein the relationships between the data objects and/or function objects are created without using a single coordinating computing device, or are created using multiple coordinating computing devices on the computer network.

25   12.   The method of Claim 11 wherein at least a part of the configuration of the networks of linked data objects and/or function objects is predefined and used to

determine which data objects and/or function objects are generated on which of the computing devices in the computer network.

13.   The method of Claim 11 wherein a user interface is defined that displays the data objects and/or function objects on a computing device on the computer

5   network using a client process that communicates with a server process wherein the data objects and/or function objects can be viewed on any computing device connected to the computer network.

14.   The method of Claim 11 wherein the data objects and/or function objects are stored in logical groups.

10   15.   The method of Claim 11 wherein the references to the data objects and/or function objects are published using electronic media, print media or human conversation.

16.   The method of Claim 11 wherein the step of generating the data objects and/or function objects provides an interface mapping for data objects and/or function

15   objects stored in application programs, databases or computer code libraries.

17.   The method of Claim 11 wherein the function objects are implemented by computer code that is complied, dynamically linked and evaluated at runtime.

18.   The method of Claim 11 wherein the function objects are implemented by computer code that is interpreted and evaluated at runtime.

20   19.   The method of Claim 11 wherein the sending or receiving of messages can be enabled or disabled based on predefined criteria.

20.   The method of Claim 19 wherein the criteria is based upon message source, message destination or message contents.